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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,851	06/11/2002	Steven D. Cech	PSS 2 0066	3678

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EXAMINER

STAFIRA, MICHAEL PATRICK

ART UNIT

PAPER NUMBER

2877

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/980,851

Applicant(s)

CECH, STEVEN D.

Examiner

Michael P. Stafira

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5,8-13 rejected under 35 U.S.C. 102(b) as being anticipated by Novini ('204).

Claim 1,18

Novini ('204) discloses a method and apparatus having a sensor device operative to respond to electromagnetic radiation at one or more wavelengths or wavelengths ranges corresponding to electromagnetic energy transmission wherein the objects are rendered opaque by naturally occurring molecular and/or atomic absorptions occurring within material comprising the objects (Col. 8, lines 43-65); an electromagnetic radiation source wherein a significant portion of and spectrum therefrom occurs in the ranges wherein the objects are generally opaque (It is the position of the examiner that the light source of Novini ('204) produces the same function of the claimed limitation) and a support structure positioned to support the sensor device and source and to maintain the objects in between the source and the sensor device (Col. 8-9, lines 66-16).

Claim 2,19

The reference of Novini ('204) further discloses a single-element photoconductive (Fig. 2, Ref. 30). (It is the position of the examiner that the camera of Novini ('204) produces the same function as the disclosed limitation.)

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Claim 3,20

Novini ('204) further discloses a processor operative to receive an output of the sensor device and operate on the output to determine the quality of the objects (Col. 8, lines 16-32).

Claim 4,21

The reference of Novini ('204) further discloses part detection, tracking, and conveyance systems deployed to interact with the objects and used to both maneuver the object under test into an advantageous position between the sensor element and the source and to provide instrument control signals to both the sensor device and the source (Col. 8-9, lines 66-16).

Claim 5,22

Novini ('204) further discloses a reject system, which receives the processed output of the processor and acts to physically reject (Col. 8, lines 20-32).

Claim 8,25

The reference of Novini ('204) further discloses the source is a semiconductor LED (Col. 8, lines 45-50).

Claim 9,26

Novini ('204) further discloses the source is pulsed in order to increase a signal to noise ratio of a signal (Col. 8, lines 50-65).

Claim 10,27

The reference of Novini ('204) further discloses a one or a two dimensional array of photosensitive elements (Col. 9, lines 17-49).

Claim 11,28

Novini ('204) further discloses a processor, which receives the output of the sensor device and operates on the output to determine the quality (Col. 8, lines 16-32).

Claim 12,29

The reference of Novini ('204) further discloses part detection, tracking, and conveyance systems deployed to interact with the objects and used to both maneuver the object under test

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into an advantageous position between the sensor element and the source and to provide instrument control signals to both the sensor device and the source (Col. 8-9, lines 66-16).

Claim 13,30

Novini ('204) further discloses a reject system, which receives the processed output of the processor and acts to physically reject (Col. 8, lines 20-32).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6,7,14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Novini ('204) in view of Atkinson et al. ('501).

Claim 6, 14, 23, 31

Novini ('204) discloses the claimed invention except for the source is a black or gray body thermal emitter. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Novini ('204) with the black or gray body thermal emitter since it was well known in the art that using thermal emitter allows the inspection in a different environment that are not suited for optical wavelengths.

Claim 7, 15, 24, 32

Novini ('204) substantially teaches the claimed invention except that it does not show a source is amplitude modulated by a mechanical chopping system in order to increase a signal to noise ratio of the signal. Atkinson et al. ('501) shows that it is known to provide a mechanical chopper for a bottle inspection system. It would have been obvious to combine the device of

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Novini ('204) with the mechanical chopper of Atkinson et al. ('501) for the purpose of providing a means for pulsating the light source without using electronic elements etc...

Claim 16, 33

The reference of Novini ('204) further discloses the source is a semiconductor LED (Col. 8, lines 45-50).

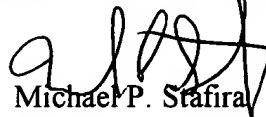
Claim 17, 34

Novini ('204) further discloses the source is pulsed in order to increase a signal to noise ratio of a signal (Col. 8, lines 50-65).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Stafira whose telephone number is 703-308-4837. The examiner can normally be reached on 4/10.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on 703-308-4881. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


Michael P. Stafira
Primary Examiner
Art Unit 2877

May 19, 2003